

This listing of claims will replace all prior versions of claims in the application.

Claim 1. (currently amended) A process of forming a ferroelectric polymer polymer film comprising:

(a) disposing a solution comprising a ferroelectric polymer film precursor composition and a solvent composition onto a substrate, wherein the solvent composition has a δ_v value of greater than or equal to $8.5 \text{ (cal/cc)}^{1/2}$, wherein $\delta_v = (\delta_d^2 + \delta_p^2)^{1/2}$, δ_d being a Hansen derivative solubility parameter δ_p being a Hansen polar solubility parameter, and

(b) removing at least a position of the solvent to produce a ferroelectric polymer film, wherein the solvent composition comprises one or more ~~solvents selected from the group consisting of~~ solvent chosen from among formamide, ethylene carbonate, dipropylene glycol, gamma-butyrolactone, dimethyl sulfoxide, acetonitrile, n-butyl benzyl phthalate, diethylene glycol, dimethyl phthalate, acetophenone, methoxypropyl acetamide, N-N-dimethylacetamide, ethylene glycol, ethyl cinnamate, diethyl phthalate, N-methylmorpholine, benzonitrile, ethylene glycol 2-ethylhexyl ether, benzyl alcohol, morpholine, ethylene glycol diacetate, ~~propylene glycol diacetate, propylene glycol~~, 1,4-dioxane, furfuryl alcohol, cyclohexanone, propylene glycol butyl ether, ethylene glycol monoethyl ether, diethylene glycol ethyl ether, ethylene glycol ethyl ether, ethyl-3-ethoxypropionate, ethylene glycol methyl ether, propylene glycol methyl ether, ~~propylene glycol methyl ether acetate~~, N-ethylmorpholine, methyl n-propyl ketone, mesitylene, diethylene glycol ethyl ether acetate, diethylene glycol methyl ether, cyclohexanol, 4-methyl-3-penten-2-one, 2-methyl-2,4-pentanediol, ethyl benzene, 1-decanol, 1-isopropyl-2-methylimidazole, ethyl lactate, 2-hexyl acetate, diethylene glycol butyl ether acetate, diethyl ketone, 1-methoxy-2-butanol, and diethylene glycol butyl ether; and

(c) ~~irradiating the film with an electric beam.~~

Claim 2. (original) The process of claim 1, wherein the precursor composition comprises a vinylidene fluoride-containing polymer.

Claim 3. (original) The process of claim 2, wherein the vinylidene fluoride-containing polymer that comprises:

50 to 90 mol% of vinylidene fluoride; and
10 to 50 mol% of trifluoroethylene.

Claim 4. (original) The process of claim 1, wherein the solvent composition has a boiling point about 100° Celsius.

Claim 5. (original) The process of claim 1, wherein the solvent composition has a relative evaporation rate at 25°C of less than or equal to 1 compared to n-butyl acetate.

Claim 6. (cancelled)

Claim 7. (original) The process of claim 1, wherein the ferroelectric polymer film has an atomic force microscopy roughness of 10 to 100 Angstroms.

Claim 8. (original) The process of claim 1, wherein the ferroelectric polymer film comprises crystalline domains having an average size of 1 to 10 nanometers.

Claim 9. (original) The process of claim 1, wherein the ferroelectric polymer film has a coercivity field strength of 20 to 80 MV/m.

Claim 10. (original) The process of claim 1, wherein the ferroelectric polymer film has a polling fatigue that is no more than 70% of 100 cycles at a drive amplitude of 100MV/m.

Claim 11. (original) The process of claim 1, wherein the ferroelectric polymer has a differential permittivity of 0.5 to 15 nC/m*V.

Claim 12. (original) The process of claim 1, wherein the ferroelectric polymer film has a Curie transition temperature of 90 to 145 degrees Celsius.

Claims 13-20. (cancelled)

Claim 21. (new) The process of claim 1, wherein the solvent composition comprises one or more solvents selected from the group consisting of formamide, ethylene carbonate, dipropylene glycol, gamma-butyrolactone, acetonitrile, n-butyl benzyl phthalate, diethylene glycol, dimethyl phthalate, acetophenone, methoxypropyl acetamide, ethylene glycol, ethyl cinnamate, diethyl phthalate, N-methylmorpholine, benzonitrile, ethylene glycol 2-ethylhexyl ether, benzyl alcohol, morpholine, ethylene glycol diacetate, propylene glycol, 1,4-dioxane, furfuryl alcohol, cyclohexanone, propylene glycol butyl ether, ethylene glycol monoethyl ether, diethylene glycol ethyl ether, ethylene glycol ethyl ether, ethyl-3-ethoxypropionate, ethylene glycol methyl ether, propylene glycol methyl ether, propylene glycol methyl ether acetate, N-ethylmorpholine, methyl n-propyl ketone, mesitylene, diethylene glycol ethyl ether acetate, diethylene glycol methyl ether, cyclohexanol, 4-methyl-3-penten-2-one, 2-methyl-2,4-pentanediol, ethyl benzene, 1-decanol, 1-isopropyl-2-methylimidazole, ethyl lactate, 2-hexyl acetate, diethylene glycol butyl ether acetate, diethyl ketone, 1-methoxy-2-butanol, and diethylene glycol butyl ether

Claim 22. (new) The process of claim 1, wherein the solvent composition comprises one or more solvents selected from the group consisting of ethylene carbonate, dipropylene glycol, gamma-butyrolactone, acetonitrile, n-butyl benzyl phthalate, diethylene glycol, dimethyl phthalate, acetophenone, methoxypropyl acetamide, ethylene glycol, ethyl cinnamate, diethyl phthalate, N-methylmorpholine, benzonitrile, ethylene glycol 2-ethylhexyl ether, benzyl alcohol, morpholine, ethylene glycol diacetate, propylene glycol, 1,4-dioxane, furfuryl alcohol, cyclohexanone, propylene glycol butyl ether, propylene glycol methyl ether acetate, ethylene

glycol monoethyl ether, diethylene glycol ethyl ether, ethylene glycol ethyl ether, ethyl-3-ethoxypropionate, ethylene glycol methyl ether, propylene glycol methyl ether, N-ethylmorpholine, methyl n-propyl ketone, mesitylene, diethylene glycol ethyl ether acetate, diethylene glycol methyl ether, cyclohexanol, 4-methyl-3-penten-2-one, 2-methyl-2,4-pentanediol, ethyl benzene, 1-decanol, 1-isopropyl-2-methylimidazole, ethyl lactate, 2-hexyl acetate, diethylene glycol butyl ether acetate, diethyl ketone, 1-methoxy-2-butanol, and diethylene glycol butyl ether.

Claim 23. (new) The process of claim 1, wherein the solvent composition comprises ethyl lactate.

Claim 24. (new) The process of claim 1, wherein the solvent composition comprises propylene glycol methyl ether acetate.